## REMARKS

In the final Office Action¹ mailed November 23, 2009, the Examiner rejected claims 1-3 under 35 U.S.C. § 102(b) as being anticipated by Ootsubo et al. (U.S. Publication No. 2003/0087297, hereafter "Ootsubo"); rejected claims 1 and 2 under 35 U.S.C. § 102(b) as being anticipated by Hashimoto (U.S. Publication No. 2001/0024788, hereafter "Hashimoto"); and rejected claim 5 under 35 U.S.C. § 103(a) as being unpatentable over Hashimoto in view of Phan (U.S. Patent No. 5,434,423, hereafter "Phan") and Weatley (U.S. Patent No. 4,313,971, hereafter "Weatley").

By this amendment, Applicants propose to amend claims 1 and 5. Support for the claim amendments can be found in the Specification at, for example, page 11, line 18 to page 12, line 6. Claims 1-3 and 5 remain pending and under consideration.

Applicants respectfully traverse the rejection of claims 1-3 under 35 U.S.C. § 102(b) as being anticipated by <u>Ootsubo</u>.

Upon entry of this amendment, claim 1 will recite an apparatus for analyzing biochemical reaction using a substrate, the apparatus comprising, among other things, "an external electrode disposed opposite to the electrode of the substrate, the external electrode comprising a metal free end and a semiconductor wafer formed on the metal free end," (emphasis added). Ootsubo fails to teach or suggest at least the claimed external electrode comprising a semiconductor wafer formed on a metal free end.

Accordingly, amended claim 1 should be distinguishable over Ootsubo.

<sup>&</sup>lt;sup>1</sup> The Office Action contains statements reflecting characterizations of the related art and the claims. Regardless of whether any such statement is identified herein, Applicants decline to automatically subscribe to any statement or characterization in the Office Action.

Customer No. 22,852 Application No. 10/563.373

Attorney Docket No. 09812.0122-00000

Claims 2 and 3 depend from claim 1, and require all the elements of claim 1.

Accordingly, claims 2 and 3 should be distinguishable over <u>Ootsubo</u> at least due to their dependence.

In view of the above, Applicants respectfully request withdrawal of the rejection of claims 1-3 under 35 U.S.C. § 102(b) as being anticipated by Ootsubo.

Applicants respectfully traverse the rejection of claims 1 and 2 under 35 U.S.C. § 102(b) as being anticipated by <u>Hashimoto</u>.

Upon entry of this amendment, claim 1 will recite an apparatus for analyzing biochemical reaction using a substrate, the apparatus comprising, among other things, "an external electrode disposed opposite to the electrode of the substrate, the external electrode comprising a metal free end and a semiconductor wafer formed on the metal free end, the semiconductor wafer having a mirror finished surface facing the substrate." (emphasis added). Hashimoto fails to teach or suggest at least the semiconductor wafer having a mirror finished surface facing the substrate.

For example, <u>Hashimoto</u>, at paragraph [0025], states, "a semiconductor <u>compound</u> such as silicon oxide or various semiconductor <u>device</u> such as a CCD, FET or CMOS may be used [for the materials of the electrode]," (emphasis added).

Accordingly, <u>Hashimoto</u> at best discloses that an electrode may be formed of a semiconductor *compound* or a semiconductor *device*. <u>Hashimoto</u> does not disclose any semiconductor wafer that has a mirror finished surface. Consequently, <u>Hashimoto</u> fails to teach or suggest, "an external electrode . . . comprising a metal free end and a semiconductor wafer formed on the metal free end, the semiconductor wafer having a

mirror finished surface facing the substrate," as recited in amended claim 1 (emphasis added). Therefore, amended claim 1 should be distinguishable over <u>Hashimoto</u>.

Claim 2 depends from claim 1 and requires all the elements of claim 1.

Accordingly, claim 2 should be distinguishable over <u>Hashimoto</u> at least due to its dependence.

In view of the above, Applicants respectfully request withdrawal of the rejection of claims 1 and 2 under 35 U.S.C. § 102(b) as being anticipated by <u>Hashimoto</u>.

.Applicants respectfully traverse the rejection of claim 5 under 35 U.S.C. § 103(a) as being unpatentable over <u>Hashimoto</u> in view of <u>Phan</u> and <u>Weatley</u>.

Claim 5 depends from claim 1, and requires all the elements of claim 1. As discussed above, amended claim 1 should be distinguishable over <a href="Hashimoto">Hashimoto</a>. Accordingly, claim 5 should be distinguishable over <a href="Hashimoto">Hashimoto</a> at least due to its dependence. Further, <a href="Phan">Phan</a> and <a href="Weatley">Weatley</a> fails to cure the deficiencies of <a href="Hashimoto">Hashimoto</a>. Accordingly, claim 5 should be distinguishable over <a href="Hashimoto">Hashimoto</a>, <a href="Phan">Phan</a>, and <a href="Weatley">Weatley</a>.

.In view of the above, Applicants respectfully request withdrawal of the rejection of claim 5 under 35 U.S.C. § 103(a) as being unpatentable over <u>Hashimoto</u> in view of Phan and <u>Weatley</u>.

Applicants respectfully request that this Amendment under 37 C.F.R. § 1.116 be entered by the Examiner, placing this application in condition for allowance.

Alternatively, Applicants submit that the entry of this amendment would place this application in better form for appeal, should the Examiner dispute the patentability of the pending claims.

Customer No. 22,852 Application No. 10/563,373 Attorney Docket No. **09812.0122-00000** 

In view of the foregoing remarks, Applicants respectfully request reconsideration of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, L.L.P.

Dated: March 23, 2010

David W. Hill